REMARKS

Claims 1, 3-19 are currently pending. Claims 1 and 9 have been amended. Claim 2 has been canceled. Claim 18 and 19 have been added.

Support for the amendments can be found throughout the application as originally filed. Specifically, support for "one or more gelling agents is about 0.5 wt.% to about 50 wt.% of the combined weight of said one or more prolamins and said one or more gelling agents" can be found, for example, at Claim 2 as originally filed. No new matter has been added.

Rejections Under 35 U.S.C. § 102 Have Been Obviated:

Claims 1-17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by WO 95/28916 by Baichwal *et al.* ("*Baichwal*").

Applicants have amended independent Claims 1 and 9 by adding the limitation of "wherein said one or more gelling agents is about 0.5 wt.% to about 50 wt.% of the combined weight of said one or more prolamins and said one or more gelling agents." Such limitation was originally included in Claim 2 (now canceled). The Examiner has acknowledged that *Baichwal* does not expressly teach such limitation (*see* Page 3, third paragraph of the Office Action). Anticipation can only be established by a single prior art reference which discloses each and every element of the claimed invention. *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991), *clarified on recons.*, 18 USPQ2d 1896 (Fed. Cir. 1991). As amended, Claims 1 and 9, and their dependent claims, contain an element which is not disclosed by *Baichwal*. Accordingly, Claims 1-19 are not anticipated by *Baichwal*.

Rejections Under 35 U.S.C. § 103 Have Been Overcome

Claims 1-17 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Baichwal*. Applicants respectfully disagree for the independent reasons as follows:

A. Different Composition, Different Mechanism, Different Rationale

Baichwal teaches a gum-based excipient which may optionally contain a hydrophobic material such as zein. In such an excipient composition, the amount of heteropolysaccharide such xanthan gum is significantly higher than the amount of hydrophobic material such as zein. The xanthan gum in a *Baichwal* excipient forms a hydrophilic matrix. The sustained-release of active agent(s) is achieved by hydration and penetration of this hydrophilic matrix. Hydrophobic material such as zein can optionally be incorporated in the excipient to slow down the hydration of the gum. However, as *Baichwal* clearly points out, on pages 7-8, "the amount of hydrophobic material incorporated into the sustained release matrix is that which is effective to slow the hydration of the gums without disrupting the hydrophilic matrix formed upon exposure to an environmental fluid" (emphasis added). In order to not to disrupt the hydrophilic gum matrix, the amount of hydrophobic material (such as zein) used in the composition is significantly less than that of the hydrophilic material (such as xanthan gum). For example, *Baichwal* teaches that the weight of the heteropolysaccharide gum is "from about 15 to abut 30 percent or more by weight" (see Abstract) and that the weight of hydrophobic material is preferably "from about 1% to about 20% by weight", more preferably "from about 3% to about 12%," and most preferably "from about 5% to about 10%." In other words, in a optional mixture of hydrophilic material and hydrophobic material, the hydrophilic material is the major component and the hydrophobic material is the minor component.

In contrast, the present invention relates to a prolamin-based excipient. In the present invention, the amount of gelling agent(s) such as xanthan gum is always less than that of the prolamin. To more clearly distinguish the present invention from the disclosure in *Baichwal*, Applicants have amended independent claims 1 and 9 by adding the language "wherein said one or more gelling agents is about 0.5 wt.% to about 50 wt.% of the combined weight of said one or more prolamins and said one or more gelling agents." In a preferred embodiment, it is about 1 to about 45 wt.% of the combined weight of the gelling agent(s) and prolamin(s). In a more preferred embodiment, it is from about 2 to about 45 wt.% of the combined weight of the gelling agent(s) and prolamin(s). In an even more preferred embodiment, it is from about 5 to about 45 wt.% of the combined weight of the

gelling agent(s) and prolamin(s). In a most preferred embodiment, it is at about 10 to about 40 wt.% of the combined weight of the gelling agent(s) and prolamin(s). In the present invention, sustained release is mostly achieved by the presence of zein. The sustained release is not dependent on whether a hydrophilic matrix is formed by the gelling agent.

Hence, the composition of the present invention is completely different from that of *Baichwal*. Further, because the mechanism of achieving sustained release between *Baichwal* and that taught by the present invention is completely different, it is not obvious for one skilled in the art to modify *Baichwal* (which requires a hydrophilic matrix) to achieve the present invention (which is not dependent upon the formation of the hydrophilic matrix). More significantly, since *Baichwal* specifically states that the amount of hydrophobic material incorporated into the sustained release matrix should not cause any disruption to the hydrophilic matrix form by materials such as xanthan gum, *Baichwal* teaches away from a composition which contains more zein than xanthan gum. Therefore, *Baichwal* teaches away from the present invention.

In view of the above, Applicants respectfully submit that *Baichwal* does not render the present invention as claimed *prima facie* obvious.

B. Present Invention Provides Solution to Long-Felt Need

Alternatively, even if assuming, *arguendo*, *Baichwal* rendered the present invention *prima facie* obvious, Applicants overcome the *prima facie* obviousness with the following secondary considerations.

The formulation of pharmaceutical agents that need to be delivered in high dosages and are highly soluble in aqueous solutions has long been a challenge in the pharmaceutical industry. When the dosage is high and when the solubility is high, the amount of excipient required to achieve sustained-release is also high. As a result, the size of the dosage unit often becomes excessive and it becomes problematic to administer the pharmaceutical agent. For example, Claritin-D® 24 hour tablet (manufactured by Schering Laboratories, USA) is a matrix formulation containing 240 mg of pseudoephedrine sulfate and a film coating with 10 mg loratadine. The overall mass of the tablet is 888 mg. This drug product was introduced recently and one can reasonably assume that efforts were made

to reduce the size of the dosage form, especially in view of the published reports that, due to the size of the tablet, a number of patients suffered choking. In contrast, with the present invention, a tablet weighing only 600mg can be made and such tablet essentially has the same dissolution profile as that of the Claritin-D® 24 hour tablet manufactured by Schering (*See* Example 1 of the specification). Thus, the present invention provided solution to a well-known problem and satisfied a long-felt need.

In view of the above, Applicants respectfully submit that the claimed invention is patentable over *Baichwal*.

In view of the above, Applicants submit that the present claims are in condition for allowance, and early action to that end is respectfully requested. If any issues remain, the Examiner is invited to telephone the undersigned at (212) 790-9090.

Respectfully submitted,

Date: February 1, 2002

William J. Sipio 34,514
William J. Sipio Reg. No.

by: Jennifer T. Chin 47,487
Jennifer T. Chin Reg. No.

PENNIE & EDMONDS LLP
1155 Avenue of the Americas
New York, New York 10036-2711
(212) 790-9090

Enclosures

Appendix A

Application: 09/728,840

Attorney Docket: 9463-014

Marked up Version of Amended Claims, February 1, 2002:

(with insertion and deletion indicated in underlining and brackets, respectively)

1(Amended). A sustained-release composition comprising a core wherein said core comprises one or more active agents in combination with excipients [consisting essentially of] comprising one or more prolamins and one or more gelling agents, [and optionally containing one or more additional excipients] wherein said one or more gelling agents is about 0.5 wt.% to about 50 wt.% of the combined weight of said one or more prolamins and said one or more gelling agents.

9 (Amended). A delayed-onset composition comprises a core and a coating wherein said coating is dry-compressed and comprises expicients [consisting essentially of] comprising one or more prolamins and one or more gelling agents, [and optionally containing one or more additional exicpients] wherein said one or more gelling agents is about 0.5 wt.% to about 50 wt.% of the combined weight of said one or more prolamins and said one or more gelling agents.